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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/675,622	09/29/2000	Arvind Kumar	42390P9709	9572

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Joseph A Twarowski
Blakely Sokoloff Taylor & Zafman LLP
Seventh Floor
12400 Wilshire Boulevard
Los Angeles, CA 90025-1026

EXAMINER

PRIETO, BEATRIZ

ART UNIT PAPER NUMBER

2142

DATE MAILED: 03/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No.	Applicant(s)	
	09/675,622	KUMAR, ARVIND	
	Examiner	Art Unit	
	Prieto B.	2142	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6,8,9,15-17,22 and 23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6,8,9,15-17,22 and 23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on 29 September 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |



DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 1/12/2006 has been entered. Claims 1-6, 8-9, 15-17 and 22-23 have been examined and remain pending.
2. Acknowledgment is made to applicant's intention or election not to include a Brief Summary of the Invention section as part of the disclosure of instant application (see MPEP§ 608.01(d)).
3. Quotation of the appropriate paragraphs of 35 USC 103 that form the basis for the rejections under this section made in this Office action may be found in previous office action.
5. Claims 1-6, 8-9, 15-17 and 22-23 are rejected under 35 USC 103(a) as being unpatentable over GAO (US 6,581,094) in view of Using Network Discovery Architecture (Chapter 8), Microsoft Corp., 1999, IDS file 3/19/2001, (referred to as Microsoft hereafter)

Regarding claim 1, a user at a console creating a query, wherein the console includes a device managing a network device (see GAO: col 10/lines 1-21, col 10/lines 23-40, col 14/lines 1-7, 21-23, 27-32);

sending the query to a search engine to facilitating searching information about the network device (see GAO col 3/lines 41-47, col 14/lines 7-15, e.g. HTTP request for the requested file specified by an URL as shown on table I, lines 1-38, or table II, lines 1-23, Fig. 3, col 11/lines 25-36);

receiving a ("discovery information") query (see GAO: col 3/lines 42-47, col 5/lines 1-13) on a network device (90) storing files containing information (col 4/lines 2-3, 10-15, 31-36, col 5/lines 8-9) about the network device (Gao: col 4/lines 45-67) sent via a search engine XML enable module (Gao: col 5/lines 1-13, browser sends query to search engine 80 of Fig. 1 see col 14/lines 1-15);

receiving the result of standard Internet search including searchable UDD files matching said query (see GAO: col 4/lines 45-67, col 1/lines 60-65, col 5/lines 1-13) and wherein

said search engine includes a device (66) to input search parameters (col 3/lines 12-15) to be searched used standard Internet searching techniques (col 3/lines 42-47) using a web browser to identify

the devices (col 4/lines 63-65) one of the following parameters; type of network device, status of network device or capability of network device (col 11/lines 25-36); however, Gao does not teach using discovered IP address for network devices to generate a network topology map.

Microsoft discloses using discovered IP addresses from a discovery search, e.g. topology discovery type, to gather information about the system resources on the network including client computers, servers, and network devices such as routers. Received discovery information comprising discovery data records (DDRs) for network devices, how they are connected, and also contain information about each identified resource. The collect IP addresses are used to find other network devices that are connected to a network device, e.g. a router from which the IP addresses were obtained in this way obtaining information of all the devices connected thereto. This information is used by Network Trace to build diagrams of site system, e.g. Figure 8.1 illustrates topology (map) discovery (see p. 2-3).

It would have been obvious to one of ordinary skill in the art at the time the invention was made given the suggestion of Gao for retrieving the files for each network device each containing information of the network device for displaying on the output device of the client computer, the files written in XML enabling a single document to display a variety of digital devices, to teachings of Microsoft for generating maps of the collected network discovery information would be obvious. One would be motivated to enable to make different types of queries such as discovery type to determine the specific information to be gathered because in doing so network devices pertaining to a specific subnet may be discovered and displayed in a map form indicating the devices connected thereto and can also specify other subnets and further make subsequent searches with the results from a previous search, as disclosed by Microsoft.

Regarding claim 2, searching via a search engine XML enabled (search engine which is XML enabled see GAO: col 5/lines 8-9, or XML standard search technology see col 4/lines 2-3, 45-67); searching (query) discovery information (browser 30/50 of Fig. 1) to be sent to the XML based search engine (Gao: col 4/lines 45-64 and col 14/lines 1-32); search engine includes XML files each having information about each respective network device (Gao: col 3/lines 24-47, col 9/lines 9-13).

Regarding claim 3, manipulating the retrieved discovery information (Gao: update or upgrade retrieve UDD file data see col 14/lines 25-32, selected UDD file for retrieval and respective processing for rendering display, i.e. "manipulating" see col 3/lines 48-61, searchable UDD file via a web browser 50 see col 4/lines 45-64).

Regarding claim 4, displaying the manipulated discovery information (Gao: deliver for display selected UDD file “information” see col 3/lines 48-54, XML based document displayable on any device see col 4/lines 18-22, display of retrieved UDD file see col 11/lines 25-36 and Fig. 3).

Regarding claim 5, this claim is the machine-readable medium that provides instructions, which when executed by a machine, cause said machine to perform operations of the method claim discussed on claim 1, same rationale of rejection is applicable.

Regarding claim 6, this claim is the machine-readable medium that provides instructions, which when executed by a machine, cause said machine to perform operations of the method claim discussed on claim 2, same rationale of rejection is applicable.

Regarding claims 8-9, this claim is the machine-readable medium that provides executable instructions to perform the method associated with the searching functions discussed on the method claims 2-4, therefore same rationale of rejection is applicable.

Regarding claim 15, includes features discussed on claim 1, same rationale of rejection is applicable, further, wherein a plurality network device (90) (GAO: col 3/lines 62-col 4/line 4) including XML based discovery information (GAO: device 90 including UDD file see col 4/lines 2-3, file in the XML form see col 4/lines 45-54) and a search engine to search discover information encoded in an XML document stored in the network device (GAO: col 4/lines 2-3, 10-15, 31-36, col 5/lines 8-9) about the network device (GAO: col 4/lines 45-67, sent via a search engine XML enable module col 5/lines 1-13, browser sends query to search engine 80 of Fig. 1 see col 14/lines 1-15).

Regarding claim 16, search engine is an XML based search engine (GAO: col 5/lines 1-13), search engine includes XML files each having information about each respective network device (Gao: col 3/lines 24-47, col 9/lines 9-13), said files formatted in XML (Gao: col 4/lines 45-67).

Regarding claim 23, wherein the XML based discovery information includes data describing the capabilities, location, i.e. geographic information or URL, characteristic, features of the network device (Gao: information includes see col 4/lines 45-54, col 5/lines 39-54, device type see table I, lines 1-10).

Regarding claim 22, network appliances (“devices”) may be a printer or a personal digital assistant (i.e. a computer), and a copier (i.e. a printer), and the like (Gao; see col 3/lines 62-col 4/line 4, server and computers see col 7/lines 56-64) to be managed by a managing device (Gao: col 2/lines 64-67) and managed another device (Gao: col 15/lines 31-38).

6. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gao in view of Vaishnavi et. al. U.S. Patent No. 5,734,642 (Vaishnavi hereafter).

Regarding claims 17-18, Gao teaches where network devices include a printer, a pager, a fax machine, a personal digital assistant, a digital copier, a controller 92, I/O devices 94, a system bus 96, and a network interface circuit 100 and the like (col 3/lines 62-col 4/line 2), however Gao does not explicitly teach where network devices include a router;

Vaishnavi teaches a system/method related to system management and the discovery of network devices, including where a discovery process includes transmitting a query for information regarding the devices on the network (col 5/lines 24-43), wherein network device typically as known in the art, network devices include switches and routers (col 1/lines 11-19). It would have been obvious to one ordinary skilled in the art at the time the invention was made given Gao’s suggestion that the networked environment illustrated includes the Internet and that therefore would include a large number of the component shown and other circuits and devices well know to this configuration and which are apparent to one skilled in the art. Routers and switches would be readily apparent and inherent in Gao’s Internet based networked environment. One ordinary skilled in the art would be motivate to include other type of network devices e.g. routers/switches, those inherent in an Internet based networked system which Gao suggest can be accommodated in the definition of UDD.

Response to argument

7. Regarding claims 1-6, 8-9, 13-17 and 22-23 are rejected under 35 U.S.C. 102 as being anticipated by Gao it is argued that the applied reference does not teach claim limitation as added. Specifically, added limitation, using discovered IP address for network devices to generate a network topology map.

In response to the above-mentioned argument, Applicant’s arguments with respect to added limitation has been considered but are moot in view of the new ground(s) of rejection.

(US 6,253,337)

Maloney et. al. teaches a discovery tool for actively or passively monitoring a local access network including a passive network discovery and network topology means. The discovery tool collects traffic and usage data and maps the network connectivity.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Prieto, B. whose telephone number is (571) 272-3902. The Examiner can normally be reached on Monday-Friday from 6:00 to 3:30 p.m. If attempts to reach the examiner by telephone are unsuccessful, the Examiner's Supervisor, Andrew T. Caldwell can be reached at (571) 272-3868. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3800/4700.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system, status information for published application may be obtained from either Private or Public PAIR, for unpublished application Private PAIR only (see <http://pair-direct.uspto.gov> or the Electronic Business Center at 866-217-9197 (toll-free).

Any response to this action should be mailed to:
Commissioner of Patents and Trademarks
P.O. Box 1450
Alexandria, VA 22313-1450

Hand carried or delivered to:
Customer Service Window located at the Randolph Bldg.
401 Dulany St.
Alexandria, VA 22314

Faxed to the Central Fax Office:
(571) 273-8300 (New Central Fax No.)

Or Telephone:

(571) 272-2100 for TC 2100 Customer Service Office.

B. Prieto
Primary Examiner
TC 2100
February 27, 2006

Beatriz Prieto
BEATRIZ PRIETO
PRIMARY EXAMINER